

In the Specification

Please amend the paragraphs at page 5, lines 19-20 as follows:

Fig. 6B is a phase plot of the ion beam shown in Fig. 6A; and

Fig. 7A shows an acceleration electrode that is segmented in a direction transverse to the ion beam; and

Fig. 7B shows an deceleration electrode that is segmented in a direction transverse to the ion beam.

Please amend the paragraph starting at page 9, line 19 and ending at page 10, line 5 as follows:

In the deceleration lens system shown in Fig. 6A and described above, acceleration electrode 12, deceleration electrode 13, or both, may be segmented in a direction transverse to the ion beam. An embodiment of a segmented acceleration electrode 12 and/or a ~~segmented deceleration electrode 13~~ is shown in Fig. 7 and an embodiment of a segmented deceleration electrode 13 is shown in Fig. 7B. The acceleration electrode 12 and/or the ~~deceleration electrode 13~~ may include electrode segments 50, 51, 52, 53 and 54 above ion beam 18 and electrode segments 60, 61, 62, 63 and 64 located below ion beam 18 as shown in Fig. 7A and/or the deceleration electrode 13 may include electrode segments 50, 51, 52, 53 and 54 above ion beam 18 and electrode segments 60, 61, 62, 63 and 64 located below ion beam 18 as shown in Fig. 7B. The number and size of electrode segments may be selected for a particular application. Furthermore, independent voltages, some or all of which may be the same or different, may be applied to each of the electrode segments to achieve a desired result. Using the segmented electrodes, both the final beam density and the focus of individual parts of the beam may be adjusted. For example, if a given segment of acceleration electrode 12 has a more negative voltage than the two adjacent electrode segments, then the beam current density that passes that segment is increased and the focusing is increased. Likewise, if a given segment of deceleration electrode 13 has more positive voltage than the two adjacent electrode segments, then the beam current density that passes that segment is decreased and the focusing is increased. Thus, by

adjusting the voltages on the segments, both the density and focus of the beam may be tailored. If the voltages on electrode 13 are all negative with respect to final ground, then electron repulsing electrode 14 may be eliminated. The positions of the electrode segments across ion beam 22 may be aligned or may be staggered.